



# **CPUC TRANSMISSION PERMITTING: MEETING SITING CHALLENGES**

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California's Renewable Energy Future  
California Biodiversity Council  
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# TRANSMISSION SITING: CHALLENGES & SOLUTIONS

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- TRANSMISSION PROJECTS – PAST, PRESENT, & FUTURE
- CASE STUDIES ON CPUC TRANSMISSION SITING ISSUES AND SOLUTIONS
- FUTURE APPROACHES TO RESOLVING SITING ISSUES



# CPUC LEGAL MANDATE FOR TRANSMISSION PERMITTING

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## CPUC IS REGULATORY AUTHORITY RESPONSIBLE FOR ISSUING PERMITS FOR TRANSMISSION LINES AT OR ABOVE 50 KV

- APPLICATIONS ARE SUBMITTED AS A CERTIFICATE OF PUBLIC CONVENIENCE & NECESSITY (CPCN) FOR 200 KV & ABOVE OR AS PERMIT TO CONSTRUCT (PTC) FOR 50 KV – 200 KV
- REVIEW INVOLVES 2 CONCURRENT & PARALLEL PROCESSES 1) ENVIRONMENTAL REVIEW AND 2) GENERAL PROCEEDING CONDUCTED BY ALJ & ASSIGNED COMMISSIONER FOR NEED/COST



# CPUC TRANSMISSION ACTIVITIES-PAST, PRESENT, & FUTURE

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- OVER 17 TRANSMISSION/SUBSTATION PROJECTS SINCE 2000
- 10 PENDING TRANSMISSION/SUBSTATION PROJECTS
- AN ANTICIPATED 30 KNOWN TRANSMISSION PROJECTS NOT INCLUDING ALL RETI RELATED/ISO GENERATED PROJECTS



# ANTICIPATED FUTURE PROJECTS WITHIN NEXT 2 YEARS

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- 10 SUBSTATION PROJECTS IN NORTHERN & SOUTHERN CA.
- 8 TRANSMISSION PROJECTS IN NORTHERN/CENTRAL CA.
- 5 TRANSMISSION PROJECTS IN SOUTHERN CA.
- ADDITIONAL RETI PROJECTS FOR REMOTE RENEWABLE DEVELOPMENT



# TRANSMISSION PROJECTS HAVE SITING CHALLENGES

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## RECENT TRANSMISSION PROJECTS: ISSUES AND RESOLUTIONS

- JEFFERSON MARTIN
- DEVERS-PALO VERDE #2
- SUNRISE POWERLINK



# PG&E JEFFERSON MARTIN

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**27 MILE 230 kV LINE WITH OVERHEAD & UNDERGROUND SEGMENTS INCLUDING REBUILDING 14 MILES OF 60 KV LINE IN SAN MATEO COUNTY - MAJOR ISSUES INVOLVED:**

- IMPACTS TO ADJACENT RESIDENTIAL AREAS
- EMF ISSUES TO RESIDENTIAL & SCHOOLS
- BIOLOGICAL AND VISUAL IMPACTS
- EFFECTS TO COUNTY PARK & SFPUC WATERSHED
- TRANSITION STATION IN CITY OF SAN BRUNO



# JEFFERSON MARTIN ISSUE RESOLUTIONS

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- LOOKED AT 38 ALTERNATIVES & FULLY ANALYZED 11 ROUTES OVERHEAD & UNDERGROUND & TRANSITION STATIONS IN OVER 2000 PAGE EIR
- SELECTED PG&E UNDERGROUND ROUTE IN EXISTING ROAD - SOUTHERN SEGMENT
- OVERHEAD IN PORTION SF WATERSHED
- UTILIZED SAN BRUNO APPROVED TRANSITION POLE
- UNDERGROUND THROUGH STREETS TO MARTIN SUBSTATION





## **SCE DEVERS-PALO VERDE #2 – 275 MILES FROM AZ. TO CA.**

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- 230 MILE 500 KV LINE FROM DEVERS SUBSTATION TO PALO VERDE HUB IN AZ. W/ EXISTING DP#1 CORRIDOR-45 MILES 230 KV UPGRADES W/ EXISTING CORRIDOR DEVERS SUBSTATION TO SAN BERNADINO & VISTA SUBSTATIONS – ON BLM, PRIVATE, & MORONGO LANDS; KOFA WILDLIFE REFUGE
- REQUIRED CPUC, BLM, & ACC APPROVAL



## DEVERS-PALO VERDE #2 ISSUES

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- NEED MORONGO TRIBAL LAND APPROVAL
- CROSSING KOFA WILDLIFE REFUGE & USFWS COMPATIBILITY DETERMINATION
- AZ. CONCERNS ABOUT NEED & BENEFITS FROM PROJECT & SCE NEEDED THEIR APPROVAL
- BIOLOGICAL IMPACTS-AZ. & CA.
- CULTURAL & BIOLOGICAL IMPACTS AT DESERT CENTER - ALLIGATOR ROCK ACEC AREA



# DEVERS-PALO VERDE#2 ISSUES

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- IMPACTS TO AGRICULTURE – CA. & AZ.
- VISUAL IMPACTS FROM LINE IN RESIDENTIAL & OPEN SPACE DESERT AREAS
- FINDING WEST OF DEVERS ALTERNATIVE DUE TO UNCERTAINTY W/TRIBAL LEASE NEGOTIATIONS
- CONSTRUCTION & EMF ISSUES



## DEVERS-PALO VERDE #2 RESOLUTIONS

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- EIR/EIS SCREENED 24 ALTERNATIVES W/  
8 FULLY ANALYZED
- UTILIZED MOSTLY EXISTING DPV#1  
CORRIDOR FROM AZ. TO DEVERS SUB
- USED ALLIGATOR ROCK NORTH OF  
DESERT CENTER ROUTE-AVOID ACEC
- DEVELOPED DEVERS-VALLEY #2  
ALTERNATIVE W/IN DV#1 CORRIDOR  
W/SAN BERNARDINO NF MITIGATIONS  
DUE TO TRIBAL LEASE UNCERTAINTY



## DEVERS-PALO VERDE #2 RESOLUTIONS

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- ANALYZED NUMBER OF NORTH OF KOFA ALTERNATIVES BUT MORE IMPACTS TO BIOLOGICAL RESOURCES INCLUDING BIGHORN SHEEP-STAYED IN DP#1 CORRIDOR
- TODAY – CPUC APPROVED PROJECT BUT NOT ACC- SCE FILED PETITION TO MODIFY FOR CA. CONSTRUCTION ONLY - NOW PENDING



# SDG&E SUNRISE PROJECT

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- 150 MILE LINE IMPERIAL – SAN DIEGO
- NEW 91 MILE 500 KV LINE FROM EL CENTRO IV SUBSTATION NORTH THROUGH ANZA BORREGO DESERT STATE PARK (ABDSP) W/EXISTING 92 & 60 KV LINES UNDERGROUND OR OVERHEAD ON 500 KV TOWERS
- AT NEW 500/230 KV SUBSTATION A NEW 59 MILE 230 KV LINE TO PENASQUITOS SUB W/UNDERGROUNDING IN PARTS OF RAMONA & RANCHO PENASQUITOS-PER MOA CITIZENS ENERGY & IID CONSTRUCT & RUN 500 KV FROM IMPERIAL TO NARROWS SUB



# SUNRISE PROJECT

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- CPUC/BLM COLEAD AGENCIES EIR/EIS- COOPERATING AGENCIES - USFS, BIA, & MIRAMAR MCAS; RESPONSIBLE AGENCY STATE PARKS
- 15 SCOPING MEETINGS AND 17 CONSULTATIONS W/LOCAL & STATE AGENCIES
- 9 PUBLIC WORKSHOPS ON DRAFT & 7 PPHs
- TRIBAL CONSULTATIONS
- PUBLIC ATTENDANCE IN 100s & OVER 12,000 MAILING LIST



# SUNRISE ISSUES

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- 52 SIGNIFICANT UNMITIGABLE IMPACTS
- AGRICULTURAL IMPACTS-BOTH COUNTIES
- MANY BIO IMPACTS TO RARE & ENDANGERED SPECIES ENTIRE ROUTE
- IMPACTS TO KNOWN/UNKNOWN CULTURAL RESOURCES- ABDSP GRAPEVINE CANYON
- PROPERTY VALUES/EMF CONCERNS
- VISUAL IMPACTS ALONG ENTIRE AREA
- DE-DESIGNATION OF STATE WILDERNESS IN ABDSP
- DIMINISHING ABDSP RECREATION VALUES





# SUNRISE ISSUES

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- REDUCING PARK VISITATION-IMPACTS TO TAMARISK GROVE CAMPGROUND
- IMPACTS TO COUNTY PARKS & OPEN SPACE PRESERVES
- FIRE RISK CONCERNS-EFFECT TO FIRE FIGHTING; HIGHER PROBABILITY TO FIRES
- QUESTION NEED & BENEFITS OF PROJECT
- ADVOCATED NON-WIRES ALTERNATIVES
- CONCERNS RELATED TO AIR QUALITY & GHG ISSUES & WHETHER REDUCES FOSSIL FUEL POWER PLANT EMISSIONS



# SUNRISE ISSUES

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- VIABILITY AND NEED TO ANALYZE NON PARK ROUTES
- NEED TO ANALYZE FUTURE PHASES TO PROJECT – 500 KV & 230 KV LINES; AND CONNECTED & INDIRECT EFFECTS FROM STERLING SOLAR, ESMERALDA GEOTHERMAL, AND SEMPRA WIND (NORTHERN MEXICO) PROJECTS



# SUNRISE ISSUE RESOLUTIONS

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- 11,000 PAGE FINAL EIR/EIS  
W/RECIRCULATED DOCUMENT – 27  
ALTERNATIVES FULLY ANALYZED  
INCLUDING 4 NON PARK SOUTHERN  
ROUTES, PROJECT ALTERNATIVE  
SEGMENTS W/ 2 UNDERGROUND 230 KV  
PARTIAL & ALL UNDERGROUND OPTIONS  
IN ABDSP, SYSTEM ALTERNATIVES, & NO  
PROJECT
- 70 ALTERNATIVES SCREENED &  
ELIMINATED



# SUNRISE ISSUE RESOLUTIONS

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- APPROVED FINAL ENVIRONMENTALLY SUPERIOR SOUTHERN ROUTE-122 MILES TO MEET RENEWABLE/RELIABILITY GOALS & NON STATE PARK ROUTE
- COLOCATED W/EXISTING SWPL IN LOW FIRE RISK AREA
- USING BCD & SOUTH OPTION ALTERNATIVES TO AVOID TRIBAL LANDS- DETERMINED NOT FEASIBLE AFTER EXTENSIVE CONSULTATION W/CAMPOS
- FOLLOWING MODIFIED D ALTERNATIVE WORKING W/USFS,BLM,NAVY, & PRIVATE PROPERTY OWNERS



# SUNRISE ISSUE RESOLUTIONS

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- USE STAR VALLEY OPTION REVISION TO AVOID VIEJAS CULTURAL ISSUES & MINIMIZE VISUAL IMPACTS TO STAR VALLEY RD. RESIDENCES
- UNDERGROUND ALPINE BLVD & I-8 ALTERNATIVE W/REROUTES TO SYCAMORE CANYON & USE COASTAL LINK RECONDUCTORING
- OVER 100 APPROVED MITIGATION MEASURES FOR SOUTHERN ROUTE FOR BIO. CULTURAL, VISUAL, FIRE, AIR ETC.



# APPROACHES TO TRANSMISSION SITING ISSUES INTO THE FUTURE

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## CPUC PREFILING PROCESS:

- WORK W/UTILITIES TO RESOLVE ROUTING ISSUES AND/OR TO DEVELOP ALTERNATIVES FOR APPLICATIONS
- TRY TO MAKE SURE NO LEGAL/REGULATORY SHOW STOPPERS IN PROPOSED PROJECT OR ALTERNATIVES
- HAVE EARLY CONSULTATIONS W/ ALL APPLICABLE & AFFECTED LOCAL, STATE, & FEDERAL AGENCIES TO DO SERIOUS PROBLEM SOLVING



# APPROACHES TO SITING (CONTINUED)

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- UTILIZE RETI ENVIRONMENTAL SCREENING GUIDANCE FROM PHASE IB & 2 REPORTS INCLUDING THE “NO GO” MAPPED AREAS
- IN DRAFT EIR OR EIR/EIS PROCESS –BE VERY AGGRESSIVE W/SCOPING & AGENCY CONSULTATIONS TO IDENTIFY ROUTING ISSUES EARLY IN PROCESS

THANK YOU!